

**Dr. Duke's Phytochemical and Ethnobotanical Databases**

**List of Plants for P-COUMARIC-ACID**

Plant	Part	Low PPM	High PPM	StdDev	Reference
Actinidia chinensis	Plant				--
Agrimonia eupatoria	Plant				--
Allium cepa	Leaf				Das, V. S. R., Rao, J. V. S. 1964. Phenolic Acids of Onion Plant. Curr. Sci., 33(15): 471-472.
Allium sativum var. sativum	Bulb	2.0	58.0		--
Allium cepa	Bulb				--
Allium cepa	Root				Das, V. S. R., Rao, J. V. S. 1964. Phenolic Acids of Onion Plant. Curr. Sci., 33(15): 471-472.
Allium schoenoprasum	Leaf		21.0	-0.34446373826744014	--
Allium ampeloprasum	Plant				--
Aloe vera	Plant				Pakistan Encyclopedia Planta Medica. 1986.
Aloe vera	Leaf				Doff, W. 1953. In Vitro Tuberculostatic Action of Aloe and its Most Important Components. Arzneim-Forsch 3: 627-630.
Aloe vera	Juice				Waller, G. R., Mangiafico, S., Ritchey, C. R. 1978. A Chemical Investigation of Aloe barbadensis. Proc. Okla. Acad. Sci. 58: 69-.
Althaea officinalis	Flower				--
Althaea officinalis	Root				--
Althaea officinalis	Leaf				--
Ananas comosus	Plant	330.0	730.0	1.0	--
Anethum graveolens	Leaf		16.0	-0.34577655264533097	--
Annona muricata	Plant				--
Apium graveolens	Root				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Arachis hypogaea	Seed		20.0	-0.48301484453840043	--
Arctostaphylos uva-ursi	Leaf				--
Artemisia absinthium	Plant				--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Artemisia dracunculus	Plant				Stitt, Paul. Why George should eat broccoli.
Aspalathus linearis	Shoot		1.0	-0.7071067811865475	--
Avena sativa	Seed				--
Averrhoa carambola	Plant				--
Basella alba	Plant				--
Beta vulgaris	Plant				--
Brassica oleracea var. gemmifera	Leaf		12.0	-0.34682680414764366	--
Brassica oleracea var. botrytis l.	Leaf		13.0	-0.3465642412720655	--
Brassica oleracea var. botrytis l.	Flower		35.0		--
Brassica pekinensis	Leaf		7.0	-0.3481396185255345	--
Brassica nigra	Seed				Jim Duke's personal files.
Brassica oleracea var. italica	Leaf		13.0	-0.3465642412720655	--
Brassica oleracea var. capitata l.	Leaf	0.5	9.0	-0.34761449277437817	--
Calendula officinalis	Plant				--
Capsicum frutescens	Fruit		540.0	2.293291804958545	--
Capsicum annuum	Fruit		79.0	-0.3401508451648206	--
Carum carvi	Seed		86.0	-0.2878871950232701	--
Castanea sativa	Plant				--
Catalpa ovata	Fruit				--
Catalpa bignonioides	Leaf		15000.0	3.5884655750178984	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Centaurea cyanus	Flower				Jim Duke's personal files.
Centaurium erythraea	Plant				--
Cinnamomum verum	Bark		14.0		--
Citrus sinensis	Fruit Juice				Jim Duke's personal files.
Citrus paradisi	Fruit	0.0	53.0	-0.4886747256490017	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Citrus sinensis	Fruit	5.0	17.0	-0.6943231755501756	--
Citrus sinensis	Pericarp	5.0	75.0	1.0	--
Citrus paradisi	Pericarp	5.0	25.0	-1.0	--
Citrus limon	Fruit	6.0	102.0	-0.20876433550573723	--
Cocos nucifera	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Coffea arabica	Plant				--
Commelina communis	Flower				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Coriandrum sativum	Fruit		16.0	-0.700035632491875	--
Curcuma longa	Rhizome		345.0	1.0	--
Cyamopsis tetragonoloba	Silk Stigma Style				Kandasamy, M. K. 1986. The Stigmatic Exudate of Cyamopsis tetragonoloba L. Taub. Biochem Physiol Pflanz, 181(8): 571-575.
Cydonia oblonga	Fruit				--
Daucus carota	Root				--
Digitalis purpurea	Leaf				--
Echinacea purpurea	Fruit Juice				Jim Duke's personal files.
Elaeagnus angustifolia	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Elettaria cardamomum	Leaf				--
Elettaria cardamomum	Fruit		19.0	-0.682898261666777	--
Eleutherococcus senticosus	Root				--
Equisetum arvense	Plant				--
Eucalyptus maculata	Resin, Exudate, Sap				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Euphorbia lathyris	Leaf				--
Euphorbia hirta	Leaf				--
Fagopyrum esculentum	Testa				--
Ficus carica	Wood				--
Foeniculum vulgare	Fruit		93.0	-0.26017644798103073	--
Foeniculum vulgare	Seed	60.0	93.0	-0.2671918382565138	--
Fragaria spp	Fruit	63.0	125.0	-0.07737782584665391	Jim Duke's personal files.
Gaultheria procumbens	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Ginkgo biloba	Pollen Or Spore				Chemical Constituents of Oriental Herbs (3 diff. books)
Glechoma hederacea	Plant				--
Glycine max	Shoot				--
Glycine max	Seed	1.0	4.0	-0.5303185171481289	--
Gossypium sp	Plant				--
Hedera helix	Plant				--
Helianthus annuus	Pollen Or Spore		11.0		--
Helianthus annuus	Seed	900.0	1100.0	2.709983056618278	Jim Duke's personal files.
Hordeum vulgare	Fruit				--
Hordeum vulgare	Seed				--
Humulus lupulus	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Hura crepitans	Leaf				--
Hypericum perforatum	Plant				--
Juglans regia	Testa	160.0	600.0		--
Juglans regia	Seed	0.5	3.5	-0.531796756917183	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Juglans regia	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Juniperus communis	Leaf				--
Kalanchoe pinnata	Plant				--
Lactuca sativa	Plant				--
Laurus nobilis	Fruit		20.0	-0.6771858047250778	--
Laurus nobilis	Leaf		192.0	-0.2995654865435739	--
Lens culinaris	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
Ligustrum japonicum	Leaf				--
Linum usitatissimum	Seed		60.0	-0.364755663014079	--
Lycopersicon esculentum	Fruit				--
Lythrum salicaria	Leaf				--
Malus domestica	Leaf				--
Malus domestica	Fruit	15.0	460.0	1.836295249622603	--
Mangifera indica	Plant				--
Matricaria recutita	Plant				Kameoka, H. and Nakai, K. 1987. Components of essential oil from the root of Glycyrrhiza-glabra. Nippon Gogeikagaku Kaishi 61(9): 1119-1122.
Medicago sativa	Tissue Culture				--
Medicago sativa	Leaf				--
Melilotus officinalis	Plant				Pharmazie, 46: 156, 1991.
Melilotus officinalis	Shoot				--
Melissa officinalis	Shoot		8.3	1.414213562373095	--
Mentha x piperita	Shoot				--
Mentha x rotundifolia	Shoot				Jim Duke's personal files.
Myristica fragrans	Seed		7.0	-0.5214490785338048	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Nicotiana tabacum	Flower				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Ocimum basilicum	Leaf		760.0	-0.150429773215176	--
Oenothera biennis	Leaf				--
Olea europaea	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Ononis spinosa	Root				Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. Hager's Handbuch der Pharmazeutischen Praxis, Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.
Origanum vulgare	Plant				Stitt, Paul. Why George should eat broccoli.
Origanum majorana	Leaf		1100.0	-0.06115839551859982	--
Origanum vulgare	Leaf				--
Oryza sativa	Petiole		0.9		--
Panax ginseng	Root				--
Papaver somniferum	Pericarp				--
Persea americana	Fruit				--
Petroselinum crispum	Stem				--
Phaseolus vulgaris	Plant				--
Pimpinella anisum	Seed		737.0	1.636780984285061	--
Pinus sylvestris	Pollen Or Spore				--
Piper nigrum	Fruit				--
Pisum sativum	Seed				--
Plantago major	Plant				--
Polygala senega	Root				--
Populus balsamifera	Leaf				--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Prunus laurocerasus	Plant				--
Prunus cerasus	Fruit				--
Prunus serotina	Bark				Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
Prunus dulcis	Plant				--
Prunus armeniaca	Plant				--
Prunus persica	Leaf				--
Prunus domestica	Fruit				Jim Duke's personal files.
Pteridium aquilinum	Leaf				--
Pteridium aquilinum	Plant				--
Pueraria montana	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Pueraria montana	Flower				--
Punica granatum	Leaf				--
Punica granatum	Fruit Juice				--
Raphanus sativus	Root		91.0		--
Rheum rhabarbarum	Root				--
Rheum rhabarbarum	Pt		44.0		--
Ribes uva-crispa	Fruit				--
Ribes nigrum	Fruit				--
Ricinus communis	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Rosa canina	Tissue Culture				--
Rosa canina	Stem				--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Rubus parviflorus	Leaf				Li, C.Y. 1974. Phenolic Compounds in Understory Species of Alder, Conifer, and Mixed Alder-Conifer Stands of Coastal Oregon. <i>Lloydia</i> , 37(4): 603-607.
Rubus idaeus	Juice				--
Rubus idaeus	Leaf				--
Rubus spectabilis	Leaf				Li, C.Y. 1974. Phenolic Compounds in Understory Species of Alder, Conifer, and Mixed Alder-Conifer Stands of Coastal Oregon. <i>Lloydia</i> , 37(4): 603-607.
Rubus idaeus	Plant				--
Rubus idaeus	Bark				--
Salix alba	Plant				Williamson, E. M. and Evans, F. J., <i>Potter's New Cyclopaedia of Botanical Drugs and Preparations</i> , Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
Salvia officinalis	Plant				Stitt, Paul. Why George should eat broccoli.
Salvia sp.	Seed		19.0	-0.48597132407650845	Phenolic Compounds in Food and Their Effects on Health, 67.
Sambucus nigra	Flower				ANON. 1948-1976. <i>The Wealth of India raw materials</i> . Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Sanguisorba minor	Plant				--
Santolina chamaecyparissus	Plant				--
Serenoa repens	Fruit Juice				--
Sesamum indicum	Leaf				--
Sesamum indicum	Fruit				--
Solanum tuberosum	Tuber	4.0	250.0		--
Solidago gigantea	Plant		45.0	-1.0	--
Sophora japonica	Plant				--
Sorbus aucubaria	Plant				--
Spinacia oleracea	Leaf		133.0	-0.31505669620268567	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Stachys officinalis	Shoot				--
Tagetes patula	Plant				--
Taraxacum officinale	Plant				--
Taraxacum officinale	Flower				--
Taxus baccata	Leaf	4.0	965.0	-0.09660438372165213	--
Terminalia chebula	Plant				Kim, J. S., Lee, G. D., Kwon, J. H., Yoon, H. S. 1993. Identification of Phenolic Antioxidative Components in Terminalia chebula Retz. Han'guk Nonghwa Hakhoe Chi 36 4: 239-243.
Theobroma cacao	Seed				ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
Thymus vulgaris	Leaf		420.0	-0.2397011509117522	--
Tilia sp.	Flower				--
Trifolium pratense	Plant				J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
Trigonella foenum-graecum	Plant				--
Trigonella foenum-graecum	Stem				--
Triticum aestivum	Seed	17.0	25.0	-0.46823244684786025	--
Urginea maritima	Bulb				--
Urtica dioica	Plant				--
Vaccinium myrtillus	Fruit				--
Vaccinium corymbosum	Plant				--
Vaccinium myrtillus	Leaf				--
Vaccinium myrtillus	Fruit Juice				--
Vaccinium macrocarpon	Fruit				--
Valeriana officinalis	Plant				--
Vicia faba	Plant				--
Vigna radiata	Plant				Stitt, Paul. Why George should eat broccoli.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Vinca minor	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Viola tricolor	Plant				--
Vitis vinifera	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Zea mays	Sprout Seedling				--
Zea mays	Shoot		1.0	-0.7071067811865475	Jim Duke's personal files.
Zea mays	Seed	4.0	46.0	-0.4061463765475915	--
Zingiber officinale	Rhizome		19.0	-1.0	--